

# VTrans PDD Environmental and Hydraulics Section Annual Report January 2014

*The Environmental Section's primary mission is to assure environmental compliance with state and federal laws and regulations. The Section supports all agency programs and coordinates with resource agencies and other stakeholders to obtain state and federal permits and approvals for environmentally sensitive project designs in a timely manner.*



## HIGHLIGHTS OF THE YEAR

- Better Back Roads Program – Managed this year for the first time by Environmental, over 90 applications were received by towns, 17 of which are first time applicants to the program.
- National Historic Preservation/Structures breakthrough – The Checkered House Bridge Reconstruction Project is the ‘first in the US’ long through truss to be widened.
- Sharepoint Site connection with FHWA and ANR – Provides increased efficiency in approving NEPA docs and Title 19 Consultations.
- FHWA Environmental Excellence Award - Acknowledged Excellence in Cultural and Historical Resource Preservation on the Champlain Bridge Replacement Project.
- Resource Identification using new GPS/GIS technology – This innovative technique dovetails with Structures PIIT initiative to significantly reduce project scoping durations.
- Retainer Contract with Fluvial Geomorphologists – Introduced a holistic perspective to promote flood resiliency with roadway/river interactions and designs.
- Tropical Storm Irene – 8 culvert replacement projects constructed.
- New landscape capability to assist in project design and construction inspection.

## Key Performance Indicators

- Deliver 80% of project key milestones within 30 days of the scheduled date on January 30 of each year. (NEPA, Utility Clear, ROW Clear)
- Will obtain FHWA approval of CE level NEPA documents within 30 days of the submittal date 95% of the time.
- Less than 5% of Performance Evaluations will go Presumptive in a calendar year.

## Section Management

- VTrans Archaeology Officer elected as Chair of the TRB Research Needs Subcommittee and is currently serving as a member of a review panel for NCHRP Task 88: Transferring Ownership of Historic Bridges – Approaches and Challenges. Also elected as member of TRB Committee on Archaeology and Historic Preservation in Transportation (ADC-50).
- Completed translation of DOT Section 4(f) regulations into Business Process Management (BPM) format.
- James Brady – Enrolled in Post-Baccalaureate Certificate in Geographic Information Systems program through the Penn State World Campus.
- Justin Hadley - Attended the NHI class “Highway Hydrology”.

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- NERD – E-section work management tool has resulted in more predictable and on-time completions of ARTEMIS activities when PM requests are received.
- Completion of evaluation of railroad structures that received transportation enhancement grants.
- Completed year 5 of the Alburg-Swanton post construction monitoring for the state endangered spiny soft shell turtle. Findings were positive with regards to minimal impacts on this endangered species as a result of the construction of the Mississiquoi Bay Bridge.
- Began major revision of Hydraulics Manual.
- Presented culvert replacement guidance to 6 various groups including road foreman and RPCs.
- Continued tracking construction contractor performance of off-site activity applications.
- Wildlife Crossings/Habitat Connectivity – Collaborative approach between Highway Design and Traffic Safety and Environmental is underway with a comprehensive 2-year study to examine how I-89, US Route 2, New England Central Railroad, and local roads impact wildlife movement along the Green Mountains in the Bolton/Waterbury area.
- Cost/Benefit Analysis – VTrans costs to develop CEs for FAS Tropical Storm IRENE sites are roughly 30 times cheaper than consultant costs.
- Completed timely Archaeology and Historic Preservation review of TH Grant Programs.

### *Unmet Needs*

- Lack of Standard Detail Sheets for Landscape elements – It's not been a priority to develop these.
- Environmental Procedure Manual needs to be completed – Lack personnel and skill sets to complete.
- Delays encountered while permitting 'reclaim' projects - A clear and consistent definition is needed for reclaim projects.
- Focus on 'just in time' permitting – Extra effort is required when permits are obtained too early and then expire.
- Inability to attend training or other continuing education opportunities – Workload is too heavy.
- Failure to meet OPS project due dates – OPS projects compete with PDD ARTEMIS activities.
- Delays in the review of Waste, Borrow and Staging areas – The percentage of submitted applications that are incomplete is increasing.

### *Goals For Next Year*

- Provide training to contractors to improve the quality of off-site activity (WBS) submittals.
- Complete development of the Hydraulics Manual.
- Publish the Environmental Operations Manual.
- Complete the GIS/GPS Environmental Procedure Manual.
- Develop Landscape Standards and Details.
- Improve communication between the various environmental staff throughout the agency (PDD Environmental and PDD Construction, OPS, Planning)

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- Convert BBR Program Coordinator temporary position to permanent-full time.
- Convert Hydraulic 2-year position to permanent-full time.
- Procure Retainer Contract for Hydraulics to add both capacity and expertise.
- Begin discussions to develop hydraulic and geomorphic resiliency strategies to incorporate into designs.
- Create 1 or 2 ARTEMIS activities for OPS projects.
- Provide Roads and River Training to relevant staff.
- Hire summer intern to assist with TH Grant Program reviews.
- Obtain GIS/GPS support for staff as needed.
- Pursue Federal Work Plans.
- Take more proactive role in communicating performance measures needs to Program Managers.

### *Section Statistics*

**Deliver 80% of project key milestones within 30 days of the scheduled date on January 30 of each year. (NEPA, Utility Clear, ROW Clear)**

- The Environmental Section completed 47/79 = 59% of NEPA milestones on time
- Of the 32 missed milestones, 22 NEPA requests were received on or after the 'snapshot early finish date'.

### **Capital Program Support**

- 69 – Preliminary hydraulics requests for small bridges/culverts on state routes
- 47 – Preliminary hydraulics requests
- 52 – Final hydraulics requests including revision requests
- 34 – Hydraulics “other” requests
- 159 – Hydraulics Online shared reviews
- 75 - COE permits
- 2 - In Lieu Fee Payments - \$163,729.60 Stowe Morrisville Airport and \$264,896.28 Rutland Airport
- 59 - Arch\Hist\Bio Resource Identifications
- 151 - NEPA Documents
- 36 - NEPA Re-evals
- 42 - Title 19 Reviews
- 21 – Arch clearances with conditions after a resource ID
- 205 – Arch clearances at resource ID level with no conditions
- 12 – Arch clearances after a Phase 1 study
- 1 – Arch clearance after Phase 2
- 1 – Arch review went to Phase 3 (Swanton)
- 240 – Historic Sec 106 reviews

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- 27 – Sec (4f) reviews
- 8 - operational stormwater discharge permit applications
- 128 – Waste, Borrow and Staging sites reviewed and approved

### **OPS/Town/Private Development Support**

- 15 – 1111 permit requests for Hydraulics
- 14 - 1111 permit drainage reviews for Stormwater
- 149 – Preliminary hydraulics requests for small bridges/culverts on town roads
- 1 - Surplus Property CE Review
- 63 - Environmental Permits - OPS
- 146 – TH Structures reviewed for 22VSA14